

Work Order ID 123504

Thursday, August 07, 2014 11:17:12 AM

123504

Page 1

Item ID: D3552-23

Revision ID:

Item Name: Door Prop

Start Date: 8/07/14 Start Qty: 15.00

Required Date: 8/07/14 Req'd Qty: 15.00

Reference:

Approvals: Process Plan: NLJ

Accept

N900040100

Setup

Start

NS1

Stop

NS2***15******15***

Cust Item ID:

Customer:

QC: _____

Date: 14-08-08 Tooling: _____

Date: _____ SPC (Y/N): _____

Run

Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3552	K

100

100

Purchasing

PURCHASING

Purchasing

Memo

0.00

0.00

MJ 14/8/12Issue P/O: 25363

Purchase Part Number: B6-190-475-070N

Supplier: LS Technologies

Certificate of conformity is required

110

110

Packaging

Receive & Inspect for Damage & Mat'l Certs

0.00

Packaging

Memo

0.00

Ensure certificate of conformity is attached

120

120

QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

Memo

0.00

Test for correct pressure

DAS

38

9-89

74-9-X

15x SP/14-8-13
Polymer

Ph

M# 14-4202.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS						
Part No. _____	Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering	<input type="checkbox"/>
NCR No. _____	Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coor.	<input type="checkbox"/>	Quality	<input type="checkbox"/>
	Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other	<input type="checkbox"/>
	Suspected Unapproved	<input type="checkbox"/>	Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending	General	Folio/Program	Outside Dimensions	Pressure/Forced
	Centre Not Concentric	Bend	Grain	Over/Under tolerance	Set-up
	Cracks	BOM/Route	Hardware	Part Incorrect	Temperature/Cure
	Crimp/Kink/Ripple/Wave	Broken/Damage/Defect	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
	Cuffs	Burrs	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
	Crushing	Contamination	Misaligned/off center	Positioned Wrong	
	Heat Treat	Countersink	Mislabeled	Power Loss/Surge	Other
	Inspection Strip in Tube	Cut Too Short	Misread		
	Marks/Chatter	Drawing	Off-set		
	Turning Sequence	Drill Holes	Out of Calibration		
	Wave/Twist in Tube	Finish	Out of Sequence		
		Fit/Function			

Work Order ID 123504

Thursday, August 07, 2014 11:17:12 AM

123504

Page 2

Item ID: D3552-23

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Door Prop

Stop

NS2

Start Date: 8/07/14

Start Qty: 15.00

15

Cust Item ID:

Required Date: 8/07/14

Req'd Qty: 15.00

15

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

130

Identify as per dwg & Stock Location: ST363

0.00

IX

**DAS
28
9-89**

SEP 11 2014

130

Packaging

Packaging

Memo

0.00

140

QC21- Final Inspection - Work Order Release

0.00

14/9/12 JF

140

QC

Quality Control

Memo

0.00

JF
14-9-11

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS						
Part No. _____	Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering	<input type="checkbox"/>
NCR No. _____	Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coor.	<input type="checkbox"/>	Quality	<input type="checkbox"/>
	Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other	<input type="checkbox"/>
	Suspected Unapproved	<input type="checkbox"/>	Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre	100% QC	100% QC							
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General								
Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Folio/Program	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>	Pressure/Forced	<input type="checkbox"/>
Centre Not Concentric	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Set-up	<input type="checkbox"/>
Cracks	<input type="checkbox"/>	Broken/Damage/Defect	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Temperature/Cure	<input type="checkbox"/>
Crimp/Kink/Ripple/Wave	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Inspection Incomplete/Unqualified	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Weld	<input type="checkbox"/>
Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>	Wrong Stock Pulled	<input type="checkbox"/>
Crushing	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Misaligned/off center	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>		<input type="checkbox"/>
Heat Treat	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>	Other	<input type="checkbox"/>
Inspection Strip in Tube	<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Misread	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Marks/Chatter	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Off-set	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Wave/Twist in Tube	<input type="checkbox"/>	Fit/Function	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Picklist Print

Thursday, August 07, 2014 11:17:12 AM

Page 1

Work Order ID: 123504

123504

Parent Item: D3552-23

D3552-23

Parent Item Name: Door Prop

Start Date: 8/07/14

Required Date: 8/07/14

Start Qty: 15.00

Required Qty: 15.00

Comments: IPP Rev:A 11.04.07 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
B6-190-475-070N *B6-190-475-070N* Door Prop		Purchased	No				Each	0.0000		15	**	15x	14-8-13 SP.

Perf/9/10 O

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

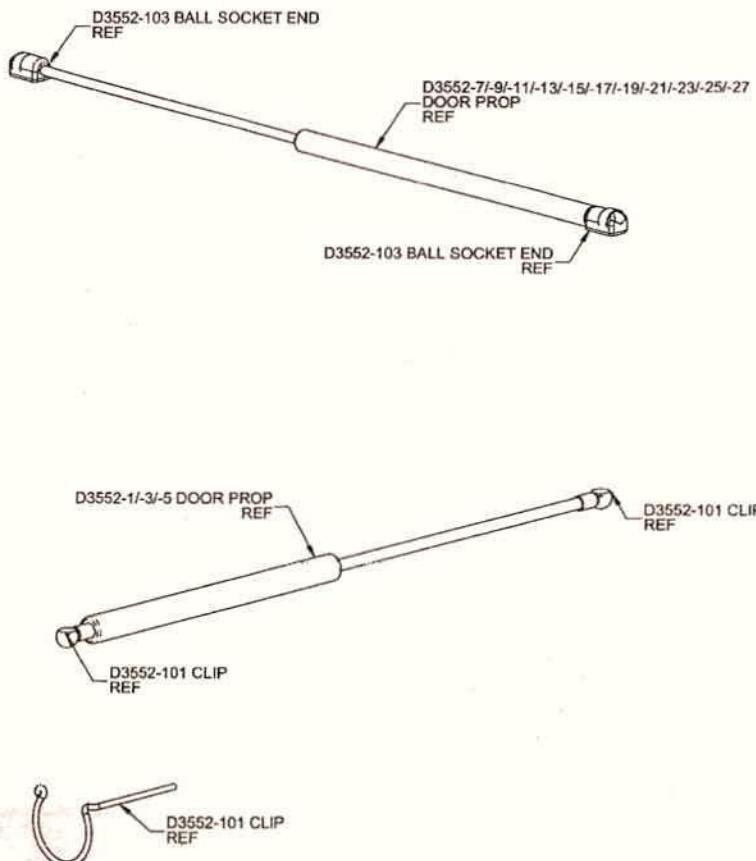
Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS							
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>				
NCR No. _____									

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube	General	Bend BOM/Route Broken/Damage/Defect Burr Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function	Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence	Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled	Other

SPECIFICATION CONTROL DRAWING

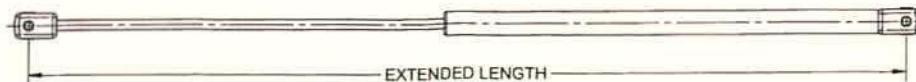


SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 123504 MJ
14-08-08

RELEASED
2012-07-24

K	ADD "X" TO LS TECHNOLOGIES P/N's TO DESIGNATE "EXTRA DAMPING" FOR D3552-15/-17/-19/-25/-27. REASON: PAR12-209.	MB	12.07.16
J	ADD PIN D3552-25/-27. REMOVE ALTERNATE PART NUMBER D3552-15/-17/-19/-25/-27. FOR -15, -17 AND -19 WAS 13848.00. NOW 1545.06. EXTENDED LENGTH FOR -15, -17 AND -19 WAS 386/15.2 NOW 387/15.2.	AP	11.12.07
I	ADD PIN D3552-23	RF	11.10.11
H	ADD PIN D3552-21	DC	11.03.10
G	FOR -15, FORCE 300/674 WAS 400/89.9, SUPPLIER P/N B8-387/15.2 WAS B8-154-387-150N. FOR -17, STROKES 1384/47 WAS 160/15.30, EXT LG: 386/15.2 WAS 407/16.0, SUPPLIER P/N B8-154-387-150N WAS B8-167-408-150N	JPH	10.11.01
F	ADD PIN D3552-15/-17/-19 AND ALTERNATE SUPPLIER	JPH	10.07.27
E	ADD PIN D3552-13 ZN B8-1, A8-1, D6-1, CHANGE NAME FROM "GAS SPRING" TO "DOOR PROP" THROUGH OUT DWG	HS	10.02.03
D	ADD PIN D3552-101 ZN D8-1, C7-1, C1-1 AND D3552-103 ZN D1-1 AND C2-1 AND ZN B8-1; ADD NOTE REGARDING D3552-101 AND D3552-103 COMPATIBILITY ZN A8-1	HS	09.04.02
C	ADD D3552-11 AND CONVERSIONS FOR INSPECTION; UPDATE PIN FOR D3552-7	LE	07.06.01
B	ADD D3552-7/9; UPDATE DESC. D3552-1/-3/-5	LE	06.10.24
A	NEW ISSUE	LE	06.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>je</i>	DART AEROSPACE LTD	
DRAWN	<i>b</i>	HAWKSBURY, ONTARIO, CANADA	
CHECKED	<i>TD</i>	REV. K	
MFG. APPR.	<i>BS</i>	D3552	SHEET 1 OF 2
APPROVED	<i>MM</i>	TITLE	SCALE
DE APPR.	<i>MM</i>	DOOR PROP	NTS
DATE	12.07.16	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON NOR MAY IT BE TRANSFERRED FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



D

D

C

C

B

B

DART PART NUMBER	DESCRIPTION	STROKE (mm/in)	EXTENDED LENGTH (mm/in)	FORCE (N/lb)	END FITTING	MATERIAL	SUPPLIER	SUPPLIER PART NUMBER OR MODEL NUMBER
D3552-1	DOOR PROP	220/8.66	530/20.6	70/15.7	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-220-530-070N
D3552-3	DOOR PROP	200/7.87	490/19.3	200/45.0	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-200-490-200N
D3552-5	DOOR PROP	175/6.89	430/16.9	150/33.7	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-175-430-150N
D3552-7	DOOR PROP	220/8.66	530/20.9	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-220-530-070N
D3552-9	DOOR PROP	200/7.87	490/19.3	200/45.0	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-200-490-200N
D3552-11	DOOR PROP	240/9.45	575/22.6	150/33.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-240-575-150N
D3552-13	DOOR PROP	220/8.66	530/20.9	140/31.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-220-530-140N
D3552-15	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	300/67.4	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-300NX
D3552-17	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	156/35.1	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-156NX
D3552-19	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	60/13.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-060NX
D3552-21	DOOR PROP	167/6.57	410/16.1	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-167-410-070N
D3552-23	DOOR PROP	190/7.48	475/18.7	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-190-475-070N
D3552-25	DOOR PROP W/EXTRA DAMPING	148/5.83	475/18.7	300/67.4	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-148-475-300NX
D3552-27	DOOR PROP W/EXTRA DAMPING	148/5.83	475/18.7	156/35.1	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-148-475-156NX
2 D3552-101	CLIP	N/A	N/A	N/A	N/A	CARBON STEEL	LS TECHNOLOGIES	C9
3 D3552-103	BALL SOCKET END	N/A	N/A	N/A	N/A	NYLON	LS TECHNOLOGIES	B10

D3552-X DOOR PROPRELEASED
2012-07-24
JW

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>[Signature]</i>	REV. K
MFG. APPR.	<i>[Signature]</i>	DRAWING NO. D3552
APPROVED	<i>[Signature]</i>	SHEET 2 OF 2
DE APPR.	<i>[Signature]</i>	TITLE DOOR PROP
DATE 12.07.16		SCALE NTS

NOTES:
 1) IDENTIFICATION: IDENTIFY PER QSI 044 6.2.
 2) D3552-101 CLIP IS ONLY COMPATIBLE WITH D3552-1/-3/-5 DOOR PROPS.
 3) D3552-103 BALL SOCKET END IS ONLY COMPATIBLE WITH D3552-7/-9/-11/-13/-15/-17/-19/-21/-23/-25/-27 DOOR PROPS.

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 WRITTEN PERMISSION FROM DART AEROSPACE LTD.

8 7 6 5 4 3 2 1

A



LS Technologies Inc
314 Jessop Ave
Saskatoon, SK, S7N 1Y6
Ph: (306) 683-5000 Fax: (306) 683-6403

Certificate of Compliance

Aug 12, 2014

This is to certify that the parts listed below meets specifications as required by your order.

15 Units : D3552-23 B123504 Gas Spring

Country of Manufacture: Canada
Date of Manufacture : June 2014
This product is ROHS compliant.

Purchase Order # 25363
Invoice # 11596

L S Technologies Inc Canada

A handwritten signature in blue ink, appearing to read 'Nolan Fehr'.

Nolan Fehr
Manager



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO25363**

Purchase Order Date 8/12/2014

PO Print Date 9/3/2014

Page Number 2 of 2

Order From :

LS TECHNOLOGIES INC.
314 JESSOP AVE
SASKATOON, SK S7N 1Y6
CA

VC-LST0001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 306 683 5000

Buyer Michael Gregoire

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Customer POID

10127-2607

Customer Tax #

Net 30

Terms

CAD

Currency

FOB

EXW - (Ex Works)

Ship Acct:

3	71475-45	Bo-190-475-070N-Gas Spring	8/12/2014	1.00	\$0.00	\$0.00
			No	Each		
			8/19/2014			

Part being returned for replacement.

NCR14-4202

Snag: Soft when being compressed

B123504

EMA11596

Line Total: \$0.00

PO Total: \$487.50

PO Instructions: Fedex Acc#151793240

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 3

Change Date: 9/3/2014

LS TECHNOLOGIES INC

Saskatoon, SK S7N 1Y6
314 Jessop Ave
Saskatoon , SK S7N 1Y6
Ph # (306) 683-5000

Packing Slip

P.O. No.	Date	Invoice #
25363	9/03/2014	11681

Name / Address
Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7

Ship To
Main Finished Goods Location Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7

Ship	Via	FOB
9/03/2014	UPS	

Qty	Description
1	D3552-23 rev.K B123504 Gas Spring (B6-190-475-070N) Warranty - RE: NCR14-4202 Shipping - UPS - Tracking # 1ZV659Y22049983304



LS Technologies Inc
314 Jessop Ave
Saskatoon, SK, S7N 1Y6
Ph: (306) 683-5000 Fax: (306) 683-6403

Certificate of Compliance

September 03, 2014

This is to certify that the parts listed below meets specifications as required by your order.

1 Unit : D3552-23 B123504 Gas Spring

Country of Manufacture: Canada
Date of Manufacture : June 2014
This product is ROHS compliant.

Purchase Order # 25363
Invoice # 11681

L S Technologies Inc Canada

A handwritten signature in blue ink, appearing to read "Nolan Fehr".

Nolan Fehr
Manager